



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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REGIONAL
ADMINISTRATOR'S
DIVISION

October 24, 2022

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Dear Kimberly Bose:

The U.S. Environmental Protection Agency has reviewed the Federal Energy Regulatory Commission's June 2022 Notice of Intent to Prepare an Environmental Impact Statement for Goldendale Energy Storage Project (EPA Project Number 21-0001-FERC). EPA has conducted its review pursuant to the National Environmental Policy Act and its authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

The NOI evaluates the potential environmental impacts associated with a proposal is a closed-loop pumped-storage hydropower facility with an upper and lower reservoir located about eight miles southeast of Goldendale, Washington. It will generate 1,200 megawatts of electricity while also storing wind and solar electricity to use when it is needed.

EPA appreciates the information provided in the NOI. Thank you for the opportunity to provide scoping comments for this project. EPA is providing recommendations when preparing the EIS, including those related to the purpose and need, environmental justice and climate change. Enclosed are EPA's more detailed recommendations.

If you have questions about this review, please contact Lauren Boldrick of my staff at (907) 271-5097 and boldrick.lauren@epa.gov, or me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

**U.S. EPA Detailed Comments on the
Goldendale Energy Storage Project NOI
Klickitat County, Washington
September 2022**

Purpose and Need

EPA recommends the EIS discuss how the public's need for energy services would be met with and without the project. In particular, the EIS should evaluate the extent to which existing renewable and fossil fuel energy facilities at current production levels are able to supply regional users' current and future needs. The Project's ability to meet future local and regional energy needs, along with other proposed renewable energy and fossil fuel projects (i.e., those that have permit applications in queue with the States of Washington and Oregon and the U.S. Government) should be clearly discussed, along with relative consistency or inconsistency with national and state environmental goals and policies. The analyses will inform how future decision-making best aligns with the agency's statutory authorities and policies with respect to Executive Order (EO) 13990's mandate to account for the benefits of reducing climate pollution.¹

EPA recommends the EIS consider the proposed project's ability to support the electric grid, including its capability of relieving grid stresses by quickly responding to capacity needs during high demand periods, and by absorbing excess energy during low demand periods. This information will further enable FERC, and the public, to understand what areas and facilities should be prioritized for development. EPA recommends development of this valuable information for the public and decision-makers, consistent with CEQ's current position, as expressed in the preamble to their October 7, 2021, notice of proposed rulemaking.¹

Alternatives Analysis

EPA recommends that the EIS explore and objectively consider a full range of alternatives and evaluate in detail all reasonable alternatives that fulfill the project's purpose and need. This may include alternate reservoir sites within the region that may be serviced by the energy provided by the project. We encourage selection of alternatives that protect, restore, and enhance the environment, and also support efforts to identify and select alternatives that maximize environmental benefits that avoid, minimize, and/or otherwise mitigate environmental impacts.

In the EIS, present the environmental impacts of the proposed action and alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14 (b)). Describe how each alternative was developed, how it addresses project objectives, how it will be implemented, and quantify the potential environmental impacts of each alternative to the greatest extent (e.g., acres of habitat impacted; change in water quality). We also recommend comparing the costs and benefits of each of the alternatives, including the costs for required mitigation measures. Further, discuss the reasons for eliminating alternatives to the proposed action (40 CFR 1502.14 (a)).

Impacts Analysis

The EIS should describe the scale it uses to categorize the extent of potential impacts to specific resources. The scale should consider the context and intensity of the impact based on four parameters:

¹ White House. "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." *Regulations.gov*, 20 Jan. 2021, <https://www.regulations.gov/docket/CEQ-2021-0002/unified-agenda>. Accessed on 10/19/2022.

detectability, duration (i.e., short-term, or long-lasting), spatial extent (i.e., localized, or widespread), and magnitude (i.e., less than severe or severe, where the term “severe” refers to impacts with a clear, long-lasting change in the resource’s function in the ecosystem or cultural context). EPA recommends that the EIS transparently account for how subject matter experts applied these criteria to categorize impacts to resources. Including a breakdown for each resource and stressor/impact and applying the parameters to demonstrate how the resources were assigned a category including negligible, minor, moderate, and major, would increase transparency for the public’s understanding.

Climate Change

EPA recommends the NEPA document consider ongoing and projected regional and local climate change and ensure robust climate resilience/adaption planning in the project design. Ongoing and projected regional and local climate impacts include, but are not limited to, drought, high intensity precipitation events, at-risk areas not yet designated as flood zones, and increased fire risk. Consideration of these impacts could help avoid infrastructure investments in vulnerable locations, and unintended impacts on local communities. Also consider relevant state, tribal, or local adaptation plans.

EPA also recommends the NEPA document include measures to ensure resilience/adaptation to protect the infrastructure investment from the effects of climate change (on the project). The long-lived nature of infrastructure makes consideration of the ongoing and projected impacts of climate change even more important. It is not sufficient to ensure resilience of the project to risks under current climate conditions only. Considering potential climate change impacts helps ensure that investments made today continue to function and provide benefits, even as climate conditions change.

Regarding regional energy grids and markets, EPA notes that in 2020, the State of Oregon established GHG reduction goals for 2035 and 2050, for 45% and 80%. Similarly, the State of Washington has committed to similar greenhouse reduction goals through emission “capping”. Discussion in the EIS on how this project’s greenhouse gas emissions impact national and state climate goals is helpful to include in the analysis.

Wildlife Impacts

EPA recommends conducting surveys in the project area as part of the impact analysis to identify invertebrate species, flora, and other wildlife present in the project area. Washington and Oregon’s Departments of Fish and Wildlife, conservation groups, and tribal governments may have existing information and resources to support this survey.

EPA recommends the NEPA document analyze the impact of the proposed water withdrawals for filling and maintaining the reservoirs for this project on wildlife, including fish. Include in this analysis identification of any Endangered Species Act species and/or critical habitat, and identification of those species relied upon as a subsistence resource. EPA notes that there are several nearby rivers proposed to be used for water withdrawals to support the project, and that these rivers contain ESA listed species. EPA recommends consulting with U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Washington and Oregon’s Departments of Fish and Wildlife where there are potential project impacts to federal or state listed species or habitat impacts.

As the proposed reservoirs have potential to attract wildlife (e.g., avian species) consider surrounding hazards that may impact these species. EPA recommends the NEPA document assess this potential risk and include a detailed management strategy to address these issues in the alternatives analysis.

Water Resource Impacts

To fully characterize the impacts to water quality that may result from this project, EPA recommends the NEPA document describe the current conditions of the area (i.e., acreage of wetlands, ditched and natural streams, Clean Water Act Section 303(d) listed waters, Total Maximum Daily Load plans, etc.).

EPA recommends the NEPA document characterize the direct, indirect, and cumulative impacts that each of the proposed alternatives will have on the current conditions and how each of the alternatives account for and mitigate impacts. EPA recommends that the NEPA analysis also clearly explain how the project fits into broader goals and efforts related to watershed management and water conservation in the area.

Construction activities of the proposed project may be subject to regulatory requirements and require permitting, such as Clean Water Act Sections 401, 402, and 404 permits. EPA recommends the EIS explain the limits imposed by the permits describing how the proposed project's construction and operations anticipated discharges, associated monitoring and reporting requirements, and described other provisions that ensure that the discharge does not hurt water quality or people's health.

Clean Water Act Section 401

The CWA provides states and authorized tribes the authority to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into waters of the U.S. This section of the CWA is an important tool for states and authorized tribes to help protect the water quality of federally regulated waters within their borders, in collaboration with federal agencies. In developing the NEPA document, EPA recommends early coordination with the States of Washington and Oregon, tribes that have treatment in a similar manner as a state and CWA § 401 authority for the purposes of streamlining regulatory processes.

Clean Water Act Section 402

EPA recommends the NEPA document identify any discharges to waters of the U.S. that are known, or are likely, to occur during construction and operation of the project and how these discharges will be managed and minimized. Identify the NPDES permits that will be obtained for the construction phase, new (or modifications to) existing permits for operations, and how any previous permit exceedances could be prevented by incorporating pollution prevention measures into the project. Describe any site-specific best management practices (BMPs) or stormwater pollution prevention plans that will be used during construction to minimize those impacts. Examples of BMP measures to include for analysis are physical measures like silt fencing; timing and sequencing restrictions; setback provisions from existing streams, riparian areas, or wetlands; equipment decontamination; and/or invasive species management.

Clean Water Act Section 404

The proposed project may require a permit under CWA § 404 from the U.S. Army Corps of Engineers for the discharge of dredged or fill material into waters of the U.S. Wetlands, vegetated shallows, mud flats and cobble substrates are all considered special aquatic sites under the CWA § 404(b)(1) Guidelines (40 CFR 230).

EPA recommends that the NEPA document:

- Clearly identify any discharges to waters of the U.S. that are known, or likely, to occur that will be subject to CWA § 404. Identify and describe the impact of those discharges, control measures to be employed to address those impacts, and BMPs to prevent discharge of water and pollutants.

- Include sufficient information that can serve as a basis to determine whether the project would satisfy the requirements for the CWA § 404 permit or identify appropriate measures to mitigate the project's impacts to all waters of the U.S.
- Structure the alternatives analysis so that it is consistent with meeting requirements of both the CWA and NEPA.
- Describe the regulatory criteria and processes utilized to screen potential alternatives and thoroughly evaluate alternatives that would pose less adverse impacts.
- Describe how compensatory mitigation will be quantified and provided to offset impacts, with specific project examples and options as available.

Aquatic Habitat

EPA recommends the NEPA document describe aquatic habitats in the affected environment (e.g., habitat type, plant and animal species, functional values, and integrity) and the environmental consequences of the proposed action on these resources. Evaluate impacts to aquatic resources in terms of the impacted acreage and by functions performed. Project construction, operation, and maintenance may affect a variety of aquatic resources. The project has potential to degrade habitat for fish and other aquatic biota, and these resources may experience varying degrees of impacts and alteration of their hydrologic functions. For any impacts that cannot be avoided through siting and design, describe the types, location, and estimated effectiveness of BMPs applied to minimize and mitigate impacts to aquatic resources.

Hazardous Waste

EPA recommends using clear, concise language, including figures, to relay critical information regarding the potential health concerns and impacts to local water resources caused by hazardous waste in the proposed project area. Smelter operations contaminated the site's soil and groundwater with fluoride, polycyclic aromatic hydrocarbons, cyanide, and polychlorinated biphenyls.² We recommend the EIS analyze a mitigation measure that could include clean-up of the contamination left behind at the Columbia Gorge Aluminum smelter site. This measure could include a study and subsequent development of a cleanup plan to address contamination left behind by past smelter operations in this area.

Air Quality

EPA recommends the NEPA document include a discussion of ambient air conditions (baseline or existing), National Ambient Air Quality Standards and nonattainment areas, and potential air quality impacts of the proposed project for each alternative. In estimating criteria pollutant emissions for the analysis area, discuss the timeframe for release of these emissions through the license lifespan of the proposed project.

To minimize the environmental impacts of construction related work, EPA recommends the NEPA document identify actions to minimize the impacts to local air quality, especially any fugitive dust and diesel emissions. At a minimum, EPA recommends the NEPA document include a discussion of the following information about the surrounding airshed:

- Any adverse impact on air-quality-related values in a federal Class I area or state wilderness area that may result from this project.

² State of Washington, Department of Ecology. "Columbia Gorge Aluminum." Columbia Gorge Aluminum - (11797), 2022, <https://apps.ecology.wa.gov/cleanupsearch/site/11797>. Accessed on September 27, 2022.

- Annual emissions greater than the basic Prevention of Significant Deterioration emission thresholds that currently exist in the project area.
- Any violation of state or federal ambient air quality standards that may result from this project.
- Interference with the maintenance or attainment of state or federal ambient air quality standards in the analysis area that may result from this project.
- Increases in the frequency or severity of existing violations of state or federal ambient air quality standard in the analysis area.
- Exposure of nearby populations to increased levels of diesel particulate matter and other air toxics, especially during construction phases which might utilize heavy equipment.
- Delays in the timely attainment of standard, interim emission reduction, or other air quality milestone promulgated by the EPA or state air quality agency; or exposure of sensitive receptors to substantial pollutant concentrations.
- Consider potential mitigation measures for construction equipment and fugitive dust that may lessen the severity of the air impacts on the local environment.

Coordination with Tribal Governments

EPA encourages FERC to consult with and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the NEPA document describe the issues raised during the consultations and how those issues were addressed, consistent with EO 13175, *Consultation and Coordination with Indian Tribal Governments*.

Environmental Justice

EO 12898 directs federal agencies to identify and address the disproportionately high and adverse human health effects of federal actions on minority and low-income populations, to the greatest extent practicable and permitted by law. EO 13985 on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* includes a modern definition of equity that clarifies a broader approach. EPA recommends that the EIS document clearly describe and document identification of communities with EJ concerns, any potential disproportionate impacts to communities with EJ concerns from the proposed project, the processes to meaningfully engage communities with EJ concerns throughout the NEPA analysis, and steps taken to address EJ concerns.

Assessing EPA's Environmental Justice Screening and Mapping Tool (EJScreen) information is a useful first step in understanding locations that may be candidates for further review or outreach.³ EPA considers a project to be in an area of potential environmental justice (EJ) concern when an EJScreen analysis for the impacted area shows one or more of the eleven EJ Indexes at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends an EJScreen analysis consider EJScreen information for the block group(s) that contains the proposed action(s) and a one-mile radius around those block groups.

It is important to consider all areas impacted by the proposed action(s). Areas of impact can be a single block group or span across several block groups and communities.⁴ When assessing large geographic areas, consider the individual block groups within the project area in addition to an area-wide assessment. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these

³ <https://ejscreen.epa.gov/mapper/>. Accessed on 10/19/2022.

⁴ Agencies should define community as "either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions" (Interim Justice40 Guidance – Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, January 27, 2021).

indicators.⁵ As the screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen outputs. Further review or outreach may be necessary for the proposed action(s). To address these potential concerns, EPA recommends:

- Applying methods from "Environmental Justice Interagency Working Group Promising Practices for EJ Methodologies in NEPA Reviews" report, or the Promising Practices Report, to this project.⁶ The Promising Practices Report is a compilation of methodologies gleaned from current agency practices concerning the interface of EJ considerations through NEPA processes.
- Characterizing project site(s) with specific information or data related to EJ concerns.⁷
- Describing potential EJ concerns for all EJ Indexes at or above the 80th percentile in the state and/or nation.
- Describing block groups that contain the proposed action and at a minimum, a one-mile radius around those areas.
- Describing individual block groups within the project area in addition to an area-wide assessment.
- Supplementing data with county level reports and local knowledge.

Traditional Ecological Knowledge

EPA recommends the integration of traditional environmental knowledge into the EIS analysis, as appropriate. Such anthropological work can include the collection of local and traditional knowledge concerning the affected environment, anticipated impacts from the project, as well as traditional hunting and land use patterns in the area. In addition to reviewing any pertinent traditional environmental knowledge currently available, consider conducting additional studies as necessary to clearly identify concerns and potential impacts, including cumulative impacts, from the proposed project and project alternatives. To the extent possible, utilize this information to analyze potential impacts in the EIS.

Subsistence

EPA recommends the use of the replacement cost method (RCM) to quantify the monetary cost of replacing subsistence foods that may be lost because the proposed project and its operation. RCM is a standard technique for evaluating the dollar value of an ecosystem service (Brown & Burch, 1992; Hougner, Colding, & Soderqvist, 2006). EO 12898 Section 4 provides guidance to federal agencies to ensure protection of populations with differential patterns of subsistence consumption of fish and wildlife. Appropriate analysis of the socioeconomic, sociocultural, and ecological value of subsistence practices will explain how subsistence resources are valued in these three distinct categories and illustrate the connectedness of subsistence users to these resources and their environments.

Project infrastructure has the potential to cause loss of subsistence areas due to direct and indirect impacts, as described in the *Tribal Resources Analysis Report*.⁸

⁵ <https://www.epa.gov/ejscreen/technical-documentation-ejscreen>. Accessed on 10/19/2022.

⁶ https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. Accessed on 10/19/2022.

⁷ For more information about potential EJ concerns, refer to the July 21, 2021, Memorandum for the Heads of Departments and Agencies Interim Implementation Guidance for the Justice40 Initiative. <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>. Accessed on 10/19/2022.

⁸ State of Washington, Department of Ecology. Tribal Resources Analysis Report. June 2022, <https://apps.ecology.wa.gov/publications/parts/2206006part9.pdf>. Accessed on September 27, 2022.

Pushpum is a place where Yakama People continue to exercise Treaty reserved rights to gather traditional roots and medicines under Article III of the Treaty of 1855 and has been a site of sovereign food gathering since time immemorial⁹.

Loss of access to subsistence foods often places a direct financial burden on subsistence users in the form of lost harvest and costs associated with purchasing foods, as well as an indirect burden from stranded assets that users purchase for harvest activities (e.g., fishing and hunting equipment). For indigenous subsistence users, loss of access to subsistence foods has the additional impact to cultural practices.

Estimates have been calculated for the replacement value of subsistence foods in general (Guettabi et al. 2016), and these estimates can be applied to total subsistence harvests for affected communities (for example, indigenous peoples). Consideration should also be given to the most similar commercially available product that would replace subsistence products that represent a significant portion of a community's total harvest, such as mule deer, elk, porcupines, various small mammals, grouse, and waterfowl.¹⁰

Given the high nutritional and cultural value of subsistence food within the project location, EPA recommends analyzing the potential impacts of the proposed project to the regional subsistence economies. EPA notes that the US Department of Agriculture's Food Access Research Atlas¹¹ indicates that people who live in the tracts at and near the proposed project area, at least 500 people or 33% of the population lives further than 1 mile (urban) or 10 miles (rural) from the nearest supermarket. We also recommend the EIS consider the unique cumulative impacts caused by lack of access to local supermarkets, regional food equity and importance of subsistence way-of-life practices experienced by nearby indigenous populations. EPA finds it important that EIS analyze the impacts that the proposed project and its operations may have to the ability of these communities to maintain their existing subsistence practices. Similarly, EPA recommends robust mitigation measures be considered that avoid or minimize the impacts of the proposed project and its operation to the people who rely on the subsistence resources identified in the *Tribal Resources Analysis Report*.

Cumulative Impacts

When analyzing the project, EPA recommends determining what the cumulative impacts of the proposed project will be on human health and the environment. Include an evaluation of the proposed project's impacts in the context of interacting with, and potentially exacerbating, the effects of other projects in proximity (e.g., the timing of the work coinciding with other human or natural disturbances that are affecting the project area).

Monitoring

As the proposed project has the potential to impact many environmental resources for an extended period, EPA recommends that the project be designed to include an environmental inspection and mitigation monitoring program to ensure compliance with and efficacy of mitigation measures. EPA recommends the NEPA document describe the monitoring program and how it will be used as an effective feedback mechanism so that the project can be adaptively managed over time, and any needed adjustments can be made to the project to meet environmental objectives throughout its lifespan.

⁹ "Yakama Nation advocates for protection of Cultural Sites; opposes proposed Goldendale Pump Storage Project." Confederated Tribes and Bands of the Yakama Nation. October 6, 2021. Press Release.

¹⁰ State of Washington, Department of Ecology. *Tribal Resources Analysis Report*. June 2022, <https://apps.ecology.wa.gov/publications/parts/2206006part9.pdf>. Accessed on September 27, 2022.

¹¹ <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>. Accessed on 10/19/2022.

Financial Assurance

As local, regional, and national conditions fluctuate due to climate change, EPA suggests requiring financial assurance mechanisms in licenses and other authorizations to cover the costs of safety measures and project operation and maintenance, including specific adaptive management plans to contend with changing climatic conditions. EPA also suggests establishing a trust to assist licensees with preventing or responding to accidental catastrophic failures. Careful consideration of local impacts will ensure financial assurances for new and existing projects are considered when creating measures to incorporate climate resiliency planning and response mechanisms for infrastructure.